

## Remarks

### In the claims

Claims 1-5 and 8-12 are pending.

Claims 1-3 are amended.

Claim 5 is original.

Claims 4 and 8-12 are as previously presented.

Claims 1-3 are amended to focus on specific embodiments of the invention by limiting  $R_{30}$  to hydrogen. Claim 1 is further amended to delete the third, fourth and eighth compounds from the proviso as said compounds would no longer be encompassed by the claim.

Support is inherent in the claim. No new matter is added.

### Restriction

The Examiner has asked Applicants to elect a single invention from the following:

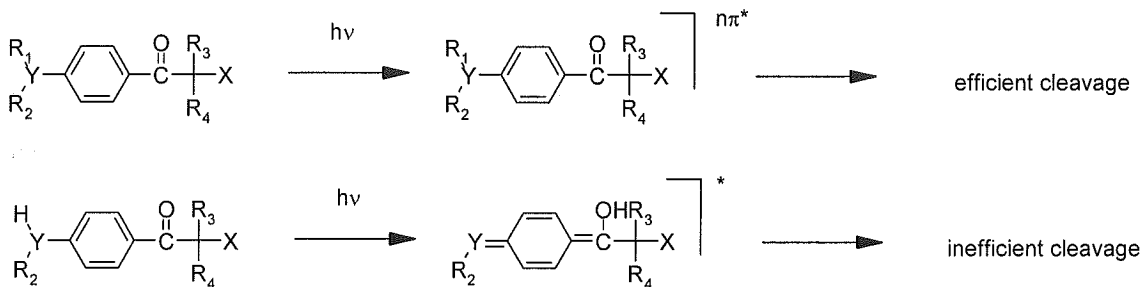
Group I - Claims 1-5, 8 and 9 drawn to photoinitiators of formula I,

Group II - Claim 10 drawn to a method of photopolymerization, and

Group III - Claim 11 and 12 drawn to a method for preparing multifunctional photoinitiators.

Applicants elect with traverse Group I, claims 1-5, 8 and 9 drawn to photoinitiators of formula I.

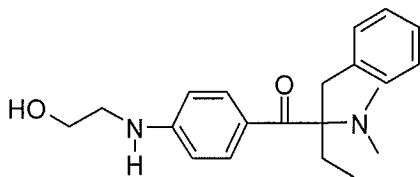
In making the restriction, the Examiner finds that there is overlap between the instantly claimed compounds and Berner, US 4,992,547. The instant amendments limit  $R_{30}$  of instant formula I to hydrogen. Applicants respectfully point out that  $\alpha$ -aminoketone photoinitiators, when substituted on the aryl ring by nitrogen, usually possess a tertiary amine at the 4-position, as is the case in Berner. The reason for this is that compounds substituted at the 4-position by nitrogen bearing a hydrogen are capable of forming a quinoidal species, especially upon excitation, which species leads to inefficient  $\alpha$ -cleavage and therefore reduced activity when compared to compounds bearing a tertiary nitrogen substituent.



X, Y = hetero atoms

With the instant amendments Applicants have focused the claims on compounds wherein the 4-position is substituted by a non-tertiary nitrogen. Such compounds are not only outside of Berner, but are also likely to be inefficient initiators as referenced above. Applicants believe that as the instantly claimed compounds are in fact effective initiators render them novel and non-obvious. Therefore, Applicants respectfully submit that the initiators of the instantly amended claims do serve as a unifying technical feature under PCT rules and kindly ask that the claims of Group II and III, i.e., claims 10-12, be rejoined either now or upon finding the elected claims allowable.

The examiner also requests that Applicants elect a single species with which to begin prosecution. Applicants hereby elect the compound of Example 1 on page 40 of the instant specification, 2-benzyl-1-[4-(2-hydroxyethylamino)phenyl]-2-dimethylamino-1-butanone,



The elected species is encompassed by all claims 1-5 and 8-12.

Consideration of the elected claims 1-5, 8 and 9 on their merits, and the potential rejoining of claims 10-12 is respectfully awaited.

Respectfully submitted,

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